

```

=> s botulinum toxin#
L1      10388 BOTULINUM TOXIN#

=> s l1 (40a) antibod###
L2      436 L1 (40A) ANTIBOD###

=> s l2 (60a) (treat#### or inject### or administ#####)
L3      179 L2 (60A) (TREAT#### OR INJECT### OR ADMINIST#####)

=> duplicate remove
ENTER L# LIST OR (END):l3
DUPLICATE PREFERENCE IS 'MEDLINE, BIOSIS, USPATFULL, PCTFULL'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L3
L4      167 DUPLICATE REMOVE L3 (12 DUPLICATES REMOVED)

=> s l4 and (1980-1993/fy)
'FY' IS NOT A VALID FIELD CODE
'FY' IS NOT A VALID FIELD CODE
'FY' IS NOT A VALID FIELD CODE
'FY' IS NOT A VALID FIELD CODE
L5      0 L4 AND (1980-1993/FY)

=> s l4 and (1980-1993/py)
L6      6 L4 AND (1980-1993/PY)

=> s l4 and (1980-1995/py)
L7      13 L4 AND (1980-1995/PY)

=> s l4 and (1980-1997/py)
L8      22 L4 AND (1980-1997/PY)

=> d 1-22

L8      ANSWER 1 OF 22      MEDLINE on STN
AN      97144234      MEDLINE
DN      PubMed ID: 8990060
TI      The EBD test--a clinical test for the detection of antibodies to botulinum
        toxin type A.
AU      Kessler K R; Benecke R
CS      Department of Neurology, Heinrich Heine University, Dusseldorf, Germany.
SO      Movement disorders : official journal of the Movement Disorder Society,
        (1997 Jan) 12 (1) 95-9.
        Journal code: 8610688. ISSN: 0885-3185.
CY      United States
DT      Journal; Article; (JOURNAL ARTICLE)
LA      English
FS      Priority Journals
EM      199704
ED      Entered STN: 19970414
        Last Updated on STN: 19970414
        Entered Medline: 19970402

L8      ANSWER 2 OF 22      MEDLINE on STN
AN      95206535      MEDLINE
DN      PubMed ID: 7898706
TI      Comparison of therapeutic efficacies of type A and F botulinum toxins for
        blepharospasm: a double-blind, controlled study.
AU      Mezaki T; Kaji R; Kohara N; Fujii H; Katayama M; Shimizu T; Kimura J; Brin
        M F
CS      Department of Neurology, Kyoto University, Japan.
SO      Neurology, (1995 Mar) 45 (3 Pt 1) 506-8.
        Journal code: 0401060. ISSN: 0028-3878.

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CY United States
 DT (CLINICAL TRIAL)
 (CONTROLLED CLINICAL TRIAL)
 Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Abridged Index Medicus Journals; Priority Journals
 EM 199504
 ED Entered STN: 19950504
 Last Updated on STN: 19970203
 Entered Medline: 19950427

L8 ANSWER 3 OF 22 MEDLINE on STN
 AN 94049866 MEDLINE
 DN PubMed ID: 8232357
 TI Use of botulinum toxin type F injections to treat torticollis in patients with immunity to botulinum toxin type A.
 AU Greene P E; Fahn S
 CS Dystonia Clinical Research Center, Columbia-Presbyterian Medical Center, New York, New York.
 SO Movement disorders : official journal of the Movement Disorder Society, (1993 Oct) 8 (4) 479-83.
 Journal code: 8610688. ISSN: 0885-3185.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199312
 ED Entered STN: 19940117
 Last Updated on STN: 19970203
 Entered Medline: 19931222

L8 ANSWER 4 OF 22 MEDLINE on STN
 AN 94020293 MEDLINE
 DN PubMed ID: 8414019
 TI Botulinum **antibodies** in dystonic patients **treated** with type A **botulinum toxin**: frequency and significance.
 CM Comment in: Neurology. 1995 Jan;45(1):204. PubMed ID: 7880304
 AU Zuber M; Sebald M; Bathien N; de Recondo J; Rondot P
 CS Service de Neurologie, Centre R. Garcin, Hopital Sainte-Anne, Paris, France.
 SO Neurology, (1993 Sep) 43 (9) 1715-8.
 Journal code: 0401060. ISSN: 0028-3878.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Abridged Index Medicus Journals; Priority Journals
 EM 199310
 ED Entered STN: 19940117
 Last Updated on STN: 19970203
 Entered Medline: 19931025

L8 ANSWER 5 OF 22 MEDLINE on STN
 AN 93263826 MEDLINE
 DN PubMed ID: 1845028
 TI Clinical correlates of response to botulinum toxin injections.
 AU Jankovic J; Schwartz K S
 CS Department of Neurology, Baylor College of Medicine, Houston, Tex. 77030.
 SO Archives of neurology, (1991 Dec) 48 (12) 1253-6.
 Journal code: 0372436. ISSN: 0003-9942.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Abridged Index Medicus Journals; Priority Journals
 EM 199306

ED Entered STN: 19930625
Last Updated on STN: 19970203
Entered Medline: 19930616

L8 ANSWER 6 OF 22 MEDLINE on STN
AN 93059130 MEDLINE
DN PubMed ID: 1433117
TI Botulinum toxin treatment of spasmodic torticollis.
CM Comment in: J R Soc Med. 1995 Apr;88(4):239-40. PubMed ID: 7745582
AU Anderson T J; Rivest J; Stell R; Steiger M J; Cohen H; Thompson P D;
Marsden C D
CS University Department of Clinical Neurology, National Hospital, Queen
Square, London.
SO Journal of the Royal Society of Medicine, (1992 Sep) 85 (9)
524-9.
Journal code: 7802879. ISSN: 0141-0768.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199212
ED Entered STN: 19930122
Last Updated on STN: 19970203
Entered Medline: 19921203

L8 ANSWER 7 OF 22 MEDLINE on STN
AN 89175390 MEDLINE
DN PubMed ID: 3235662
TI Human immune response to botulinum pentavalent (ABCDE) toxoid determined
by a neutralization test and by an enzyme-linked immunosorbent assay.
AU Siegel L S
CS Department of Toxinology, U.S. Army Medical Research Institute of
Infectious Diseases, Fort Detrick, Frederick, Maryland 21701-5011.
SO Journal of clinical microbiology, (1988 Nov) 26 (11) 2351-6.
Journal code: 7505564. ISSN: 0095-1137.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198905
ED Entered STN: 19900306
Last Updated on STN: 19970203
Entered Medline: 19890510

L8 ANSWER 8 OF 22 MEDLINE on STN
AN 88148039 MEDLINE
DN PubMed ID: 3344788
TI Negative **antibody** response to long-term **treatment** of
facial spasm with **botulinum toxin**.
AU Gonnering R S
CS Department of Ophthalmology, University of Wisconsin, Madison.
SO American journal of ophthalmology, (1988 Mar 15) 105 (3) 313-5.
Journal code: 0370500. ISSN: 0002-9394.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 198804
ED Entered STN: 19900308
Last Updated on STN: 19970203
Entered Medline: 19880407

L8 ANSWER 9 OF 22 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 1997:192086 BIOSIS

DN PREV199799491289
 TI Non-comparability of in vivo and in vitro **botulinum toxin A antibody** measurement techniques in treated cervical dystonia patients?.
 AU Duane, Drake D.
 CS Scottsdale, AZ, USA
 SO Neurology, (1997) Vol. 48, No. 3 SUPPL. 2, pp. A399.
 Meeting Info.: 49th Annual Meeting of the American Academy of Neurology. Boston, Massachusetts, USA. April 12-19, 1997.
 CODEN: NEURAI. ISSN: 0028-3878.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 2 May 1997
 Last Updated on STN: 2 May 1997

L8 ANSWER 10 OF 22 USPATFULL on STN
 AN 97:115238 USPATFULL
 TI Pharmaceutical composition containing botulinum B complex
 IN Johnson, Eric A., Madison, WI, United States
 Goodnough, Michael C., Madison, WI, United States
 Borodic, Gary E., Canton, MA, United States
 PA Associated Synapse Biologics, Cambridge, MA, United States (U.S. corporation)
 PI US 5696077 19971209 <--
 AI US 1994-316820 19941003 (8)
 RLI Continuation of Ser. No. US 1993-140328, filed on 20 Oct 1993, now abandoned
 DT Utility
 FS Granted
 LN.CNT 699
 INCL INCLM: 514/002.000
 INCLS: 424/184.100; 424/234.100; 424/247.100
 NCL NCLM: 514/002.000
 NCLS: 424/184.100; 424/234.100; 424/247.100
 IC [6]
 ICM: A61K039-08
 ICS: A61K039-00; A61K038-00; A61K038-16
 EXP 424/184.1; 424/234.1; 424/247.1; 514/2
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 11 OF 22 USPATFULL on STN
 AN 96:91828 USPATFULL
 TI Method to prevent side-effects and insensitivity to the therapeutic uses of toxins
 IN Arnon, Stephen S., 9 Fleetwood Ct., Orinda, CA, United States 94563
 PI US 5562907 19961008 <--
 AI US 1994-254238 19940606 (8)
 RLI Continuation-in-part of Ser. No. US 1993-62110, filed on 14 May 1993, now abandoned
 PRAI WO 1994-US2521 19940308
 DT Utility
 FS Granted
 LN.CNT 1546
 INCL INCLM: 424/236.100
 INCLS: 424/239.100; 424/542.000; 424/130.100; 424/141.100; 424/142.100; 424/150.100; 424/164.100; 424/167.100
 NCL NCLM: 424/236.100
 NCLS: 424/130.100; 424/141.100; 424/142.100; 424/150.100; 424/164.100; 424/167.100; 424/239.100; 424/542.000
 IC [6]
 ICM: A61K039-08
 ICS: A61K039-38; C07K016-46
 EXP 424/130.1; 424/141.1; 424/142.1; 424/150.1; 424/164.1; 424/167.1;

424/R39.1; 424/236.1; 424/542
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 12 OF 22 USPATFULL on STN
AN 96:36543 USPATFULL
TI Pharmaceutical composition of botulinum neurotoxin and method of
preparation
IN Johnson, Eric A., Madison, WI, United States
Goodnough, Michael C., Madison, WI, United States
PA Wisconsin Alumni Research Foundation, Madison, WI, United States (U.S.
corporation)
PI US 5512547 19960430 <--
AI US 1994-322624 19941013 (8)
DT Utility
FS Granted
LN.CNT 365
INCL INCLM: 514/021.000
INCLS: 514/002.000; 530/350.000; 530/363.000; 530/364.000; 530/825.000
NCL NCLM: 514/021.000
NCLS: 514/002.000; 530/350.000; 530/363.000; 530/364.000; 530/825.000
IC [6]
ICM: A61K038-00
ICS: C07K001-00
EXF 514/21.2; 530/350; 530/363; 530/364; 530/825
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 13 OF 22 PCTFULL COPYRIGHT 2004 Univentio on STN
AN 1997035604 PCTFULL ED 20020514
TIEN PHARMACEUTICAL COMPOSITIONS OF BOTULINUM TOXIN OR BOTULINUM NEUROTOXIN
AND METHODS OF PREPARATION
TIFR COMPOSITIONS PHARMACEUTIQUES DE TOXINES BOTULINIQUES OU DE NEUROTOXINES
BOTULINIQUES ET PROCEDES DE PREPARATION
IN JOHNSON, Eric, A.;
GOODNOUGH, Michael, C.
PA WISCONSIN ALUMNI RESEARCH FOUNDATION
LA English
DT Patent
PI WO 9735604 A1 19971002
DS W: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB
GE HU IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN
MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG
UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE
CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG
CI CM GA GN ML MR NE SN TD TG
AI WO 1996-US14756 A 19960916
PRAI US 1996-8/624,771 19960327
ICM A61K038-16
ICS A61K047:00 ; A61K047:18 ; A61K047:26 ; A61K047:42

L8 ANSWER 14 OF 22 PCTFULL COPYRIGHT 2004 Univentio on STN
AN 1996039166 PCTFULL ED 20020514
TIEN ANALOGS OF BOTULINUM TOXIN AND PHARMACEUTICAL COMPOSITIONS OF BOTULINUM
TOXIN
TIFR ANALOGUES DE TOXINE DE BOTULINIUM ET COMPOSITIONS PHARMACEUTIQUES DE
TOXINE DE BOTULINIUM
IN JOHNSON, Eric, A.;
GOODNOUGH, Michael, C.
PA WISCONSIN ALUMNI RESEARCH FOUNDATION
LA English
DT Patent
PI WO 9639166 A1 19961212
DS W: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB
GE HU IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN
MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG

UZ VN KE LS MW SD SZ UG AZ BY KZ RU TJ TM AT BE CH DE DK
ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN
ML MR NE SN TD TG

AI WO 1996-US75 A 19960111
PRAI US 1995-8/469,387 19950606
ICM A61K038-16
ICS C07K014:33 ; A61K031:225

L8 ANSWER 15 OF 22 PCTFULL COPYRIGHT 2004 Univentio on STN
AN 1996011699 PCTFULL ED 20020514
TIEN PHARMACEUTICAL COMPOSITION OF BOTULINUM NEUROTOXIN AND METHOD OF
PREPARATION
TIFR COMPOSITION PHARMACEUTIQUE DE NEUROTOXINE DE BOTULINUM ET PROCEDE POUR
SA PREPARATION
IN JOHNSON, Eric, A.;
GOODNOUGH, Michael, C.
PA WISCONSIN ALUMNI RESEARCH FOUNDATION
LA English
DT Patent
PI WO 9611699 A1 19960425
DS W:

AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU
JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL
PT RO RU SD SE SI SK TJ TT UA UZ VN KE MW SD SZ UG AT BE
CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI
CM GA GN ML MR NE SN TD TG

AI WO 1995-US7933 A 19950621
PRAI US 1994-8/322,624 19941013
ICM A61K038-16

L8 ANSWER 16 OF 22 PCTFULL COPYRIGHT 2004 Univentio on STN
AN 1996005222 PCTFULL ED 20020514
TIEN PURIFICATION AND PHARMACEUTICAL COMPOSITIONS CONTAINING TYPE G BOTULINUM
NEUROTOXIN
TIFR PROCEDE DE PURIFICATION ET COMPOSITIONS PHARMACEUTIQUES CONTENANT LA
NEUROTOXINE BOTULINIQUE DE TYPE G
IN JOHNSON, Eric, A.;
SUGIYAMA, Hiroshi;
MALIZIO, Carl, J.
PA WISCONSIN ALUMNI RESEARCH FOUNDATION
LA English
DT Patent
PI WO 9605222 A1 19960222
DS W:

AU JP KR AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

AI WO 1995-US7932 A 19950621
PRAI US 1994-8/287,350 19940808
ICM C07K014-33
ICS A61K039:08 ; C12P001:04

L8 ANSWER 17 OF 22 PCTFULL COPYRIGHT 2004 Univentio on STN
AN 1995017904 PCTFULL ED 20020514
TIEN BOTULINUM TOXINS FOR TREATING VARIOUS DISORDERS AND ASSOCIATED PAIN
TIFR TOXINES BOTULINUM UTILISEES DANS LE TRAITEMENT DE DIVERS TROUBLES, ET
DOULEURS ASSOCIEES
IN AOKI, K, Roger;
GRAYSTON, Michael, W.;
CARLSON, Steven, R.;
LEON, Judith, M.
PA ALLERGAN, INC.
LA English
DT Patent
PI WO 9517904 A2 19950706
DS W:

AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB HU JP KP KR
KZ LK LU LV MG MN MW NL NO NZ PL PT RO RU SD SE SK UA UZ
VN AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ

		CF CG CI CM GA GN ML MR NE SN TD TG
AI	WO 1994-US14717	A 19941216
PRAI	US 1993-8/173,996	19931228
ICM	A61K038-16	
L8	ANSWER 18 OF 22 PCTFULL COPYRIGHT 2004 Univentio on STN	
AN	1994028922 PCTFULL ED 20020513	
TIEN	TREATMENT OF NEUROMUSCULAR DISORDERS AND CONDITIONS WITH DIFFERENT	
	BOTULINUM SEROTYPE	
TIFR	TRAITEMENT DES TROUBLES ET DES PATHOLOGIES NEUROMUSCULAIRES AVEC	
	DIFFERENTS SEROTYPES DE BOTULINUM	
IN	AOKI, K., Roger;	
	GRAYSTON, Michael, W.;	
	CARLSON, Steven, R.;	
	LEON, Judith, M.	
PA	ALLERGAN, INC.	
LA	English	
DT	Patent	
PI	WO 9428922	A1 19941222
DS	W:	AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB HU JP KP KR
		KZ LK LU LV MG MN MW NL NO NZ PL PT RO RU SD SE SK UA UZ
		VN AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ
		CF CG CI CM GA GN ML MR NE SN TD TG
AI	WO 1994-US6397	A 19940607
PRAI	US 1993-8/075,048	19930610
ICM	A61K037-02	
L8	ANSWER 19 OF 22 PCTFULL COPYRIGHT 2004 Univentio on STN	
AN	1994026308 PCTFULL ED 20020513	
TIEN	A METHOD TO PREVENT SIDE EFFECTS AND INSENSITIVITY TO THE THERAPEUTIC	
	USES OF TOXINS	
TIFR	PROCEDE EMPECHANT LES EFFETS SECONDAIRES ET L'INSENSIBILITE AUX	
	UTILISATIONS THERAPEUTIQUES DES TOXINES	
IN	ARNON, Stephen, S.	
PA	ARNON, Stephen, S.	
LA	English	
DT	Patent	
PI	WO 9426308	A1 19941124
DS	W:	JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
AI	WO 1994-US5345	A 19940512
PRAI	US 1993-8/062,110	19930514
ICM	A61K039-40	
ICS	A61K039:395	
L8	ANSWER 20 OF 22 PCTFULL COPYRIGHT 2004 Univentio on STN	
AN	1994021684 PCTFULL ED 20020513	
TIEN	BOTULINUM TOXIN POLYPEPTIDES AND THEIR USE AS VACCINE ENHANCING AGENTS	
TIFR	POLYPEPTIDES DE TOXINE DE BOTULINUM ET LEUR UTILISATION EN TANT	
	QU'AGENTS D'AMPLIFICATION DE VACCINS	
IN	SESARDIC, Dorothea;	
	CHAN, Woon, Ling;	
	SHONE, Clifford, Charles	
PA	PHLSB;	
	NIBSC;	
	SESARDIC, Dorothea;	
	CHAN, Woon, Ling;	
	SHONE, Clifford, Charles	
LA	English	
DT	Patent	
PI	WO 9421684	A1 19940929
DS	W:	AU CA GB JP US AT BE CH DE DK ES FR GB GR IE IT LU MC NL
		PT SE
AI	WO 1994-GB570	A 19940321
PRAI	GB 1993-9305919.4	19930322

ICM C07K015-04
ICS C07K007:06 ; C07K007:08 ; C07K007:10 ; A61K039:08

L8 ANSWER 21 OF 22 PCTFULL COPYRIGHT 2004 Univentio on STN

AN 1994013264 PCTFULL ED 20020513

TIEN CLOSTRIDIAL TOXIN DISEASE THERAPY

TIFR THERAPIE DES TOXI-INFECTIONS AU CLOSTRIDIUM

IN CARROLL, Sean, B.;

VAN BOLDRIK, Margaret, B.;

CLEMENS, Christopher, M.;

WILLIAMS, James, A.;

KINK, John, A.

PA OPHIDIAN PHARMACEUTICALS, INC.;

CARROLL, Sean, B.;

VAN BOLDRIK, Margaret, B.;

CLEMENS, Christopher, M.;

WILLIAMS, James, A.;

KINK, John, A.

LA English

DT Patent

PI WO 9413264 A1 19940623

DS W: AU CA US AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

AI WO 1993-US11755 A 19931203

PRAI US 1992-7/985,321 19921204

US 1993-8/161,907 19931202

ICM A61K009-08

ICS A61K037:04

L8 ANSWER 22 OF 22 PCTFULL COPYRIGHT 2004 Univentio on STN

AN 1994000481 PCTFULL ED 20020513

TIEN PHARMACEUTICAL COMPOSITION CONTAINING BOTULINUM B COMPLEX

TIFR COMPOSITION PHARMACEUTIQUE CONTENANT UN COMPLEXE DE BOTULINUM B

IN JOHNSON, Eric, A.;

GOODNOUGH, Michael, C.;

BORODIC, Gary, C.

PA ASSOCIATED SYNAPSE BIOLOGICS

LA English

DT Patent

PI WO 9400481 A1 19940106

DS W: AU CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

AI WO 1993-US5973 A 19930622

PRAI US 1992-903,207 19920623

ICM C07K003-02

ICS A61K037:02 ; C07K015:04